



Low-Carbon Energy Project Siting Improvement Study: Mapping Tool Prototype

Brad McMillan and Christopher Clinton December 16, 2021



Goals

Discuss geographic information system (GIS) spatial data layers

- Provide examples of existing layers
- Provide examples of layers with data challenges
- Discuss potential other layers for a siting mapping tool

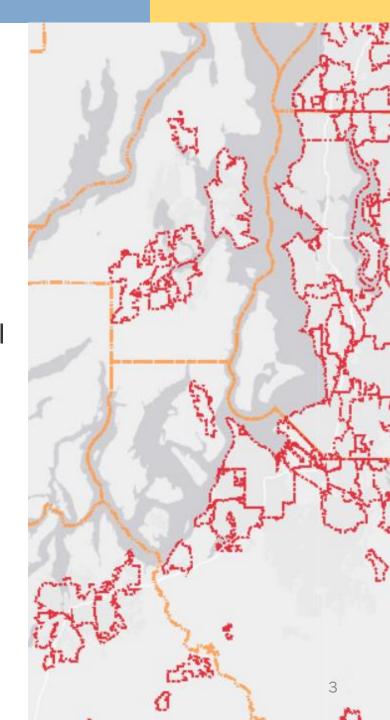
Ecology data viewer applications

- Provide overview of existing Ecology data viewer applications
- Discuss functionality for the siting mapping tool prototype
- Discuss how people might use a siting mapping tool

Spatial Data: Geographic Layers

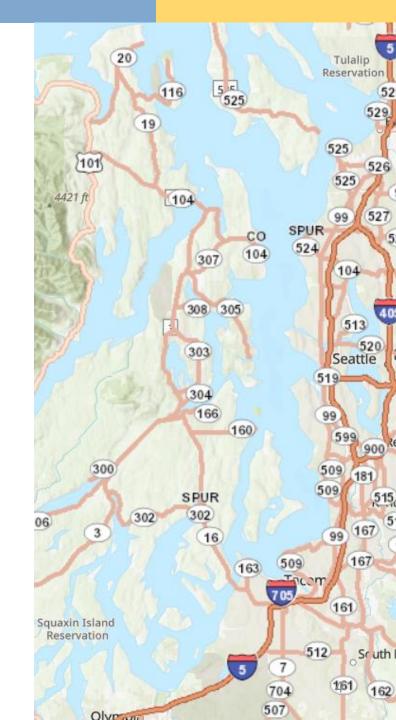
- City and county boundaries, urban growth areas*
- Tribal reservation lands*
- Public lands, including state and federal forests, parks, aquatic parcels and other managed lands*
- Township/Range/Section
- Land elevation and bathymetry (water depth)

*Layers also in the CESA prototype tool



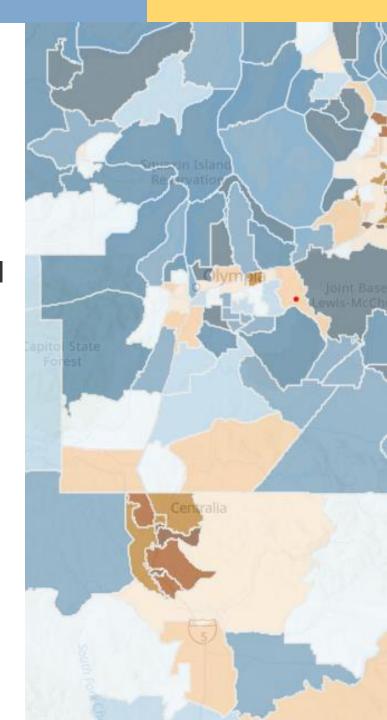
Spatial Data: Transportation Layers

- Highways and railways*
- Non-military airports*, ports (point data, not property boundaries)
- Marine vessel routes



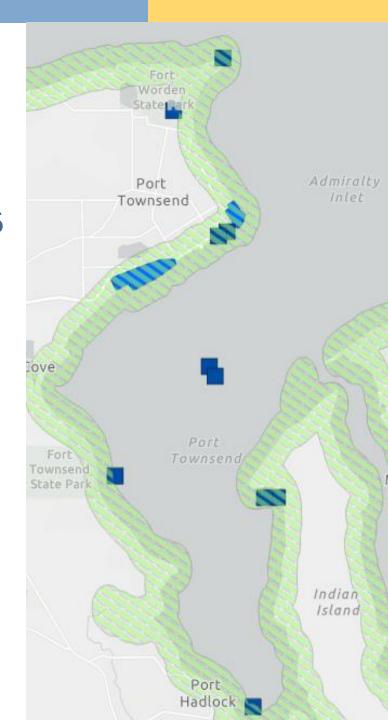
Spatial Data: Equity & Environmental Justice Layers

- Department of Health Environmental Health Disparities (EHD) data
- Census data
- Nonattainment areas for air quality



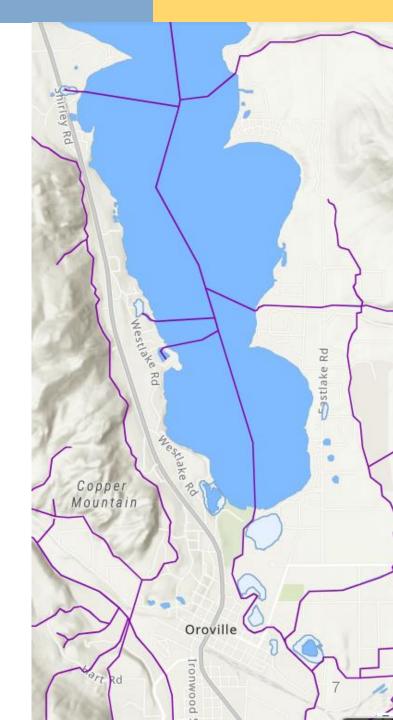
Spatial Data: Publically Viewable Cultural & Historic Layers

- Department of Archaeology and Historic Preservation cultural resource potential*
- Areas of tribal interest



Spatial Data: Water & Wetland Layers

- National Hydrography Data (NHD)*
 - Streams
 - Lakes/Ponds
 - Wetlands
 - Coastline, estuaries
 - Watersheds (hydrologic units)
- FEMA flood maps
- Sea level rise
- Shoreline Management Act jurisdictions
- U.S. maritime limits & boundaries



Spatial Data: Land Use Layers

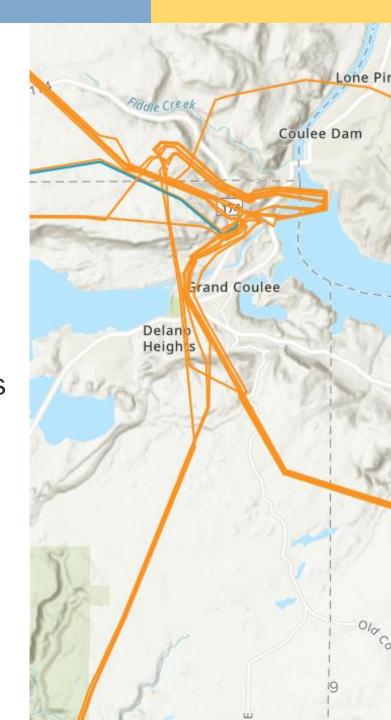
- Agricultural lands
- Toxic cleanup sites

City/County zoning data challenges



Spatial Data: Publically Available Utility Layers

- Pipelines*
- Electric transmission lines*
- Refineries, power plants, natural gas processing facilities*



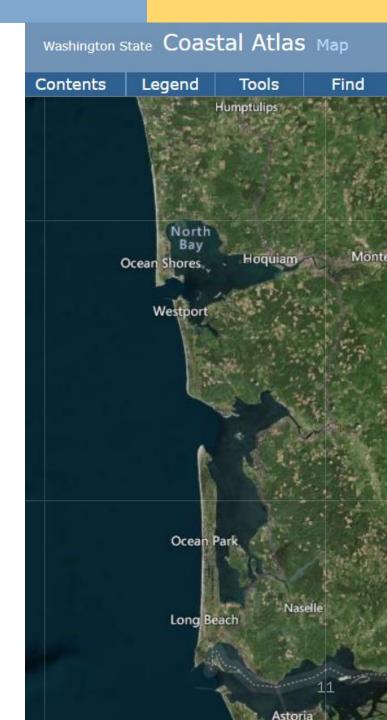
Spatial Data: Clean Energy Layers

- Solar and wind potential*
- Current and future wind and solar project locations*



Spatial Data

What else would you like to see in a siting application?





Ecology Data Viewers

A brief overview and demonstration of existing Ecology data viewers

- Coastal Atlas
- Marine Spatial Planning



Mapping Tool Functions and Usage

- Discuss functionality for the siting mapping tool
- Discuss how people might use a siting mapping tool





Thank you

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